

Recovery Plan Action Status

Plan Name: Big Spring Spinedace (*Lepidomeda mollispinis pratensis*) Recovery Plan

Plan Status: Final

Plan Date: 20-Jan-94

Lead Agency: USFWS

Lead Office: Nevada Fish And Wildlife Office

(775)

861-6300)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Big Spring spinedace (<i>Lepidomeda mollispinis pratensis</i>)	1	1.1.1	Determine life history requirements	Ongoing Current	FY 2008	FY 2011	U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife, U.S. Bureau of Land Management	Research: Demographic Studies, Research: Ecosystem Studies, Research: Habitat Requirements, Research: Migration, Research: Population Surveys	Contract, Species Expert	USGS investigation began 2008
Big Spring spinedace (<i>Lepidomeda mollispinis pratensis</i>)	2	1.1.2	Determine species interactions	Ongoing Current	FY 2006		U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife	Research: Competition, Research: Predation	Species Expert	NDOW initiated this recovery action prior to FY 2004. USGS now taking lead on ecological study of the spinedace (beginning 2008).
Big Spring spinedace (<i>Lepidomeda mollispinis pratensis</i>)	2	1.1.3	Conduct population viability analysis	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division	Research: Population Surveys	Internal Field Assistance, Species Expert	
Big Spring spinedace (<i>Lepidomeda mollispinis pratensis</i>)	2	1.1.4	Determine Condor Canyon ecosystem components	Ongoing Current	FY 2008	FY 2011	U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife, U.S. Bureau of Land Management	Research: Demographic Studies, Research: Habitat Requirements, Research: Habitat Status	Internal Technical Assistance, Species Expert	Beginning in 2008, USGS research is building upon earlier NDOW work to understand the ecosystem including native and exotic components of the aquatic system.
Big Spring spinedace (<i>Lepidomeda mollispinis pratensis</i>)	1	1.2.1	Obtain conservation agreements	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife	Acquisition: Easement	Internal Administrative	FWS working with BLM to renew grazing term permit that helps to manage vegetation within Condor Canyon (8/2009)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Big Spring spinedace (Lepidomeda mollispinis pratensis)	1	1.2.2	Obtain instream water rights	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife, U.S. Bureau of Land Management	Acquisition: Other	Internal Administrative	
Big Spring spinedace (Lepidomeda mollispinis pratensis)	2	1.2.3	Implement Condor Canyon HMP	Not Started			U.S. Bureau of Land Management	Management: General	Internal Technical Assistance	
Big Spring spinedace (Lepidomeda mollispinis pratensis)	3	1.2.4	Amend critical habitat	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division	Management: Land Use, Management: Planning	Internal Administrative, Internal Technical Assistance, Species Expert	
Big Spring spinedace (Lepidomeda mollispinis pratensis)	2	1.2.5	Develop nonnative species control plan	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife	Management: Planning, Management: Predator and Competitor Control	Internal Technical Assistance, Species Expert	
Big Spring spinedace (Lepidomeda mollispinis pratensis)	2	1.2.6	Implement nonnative species control plan	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife	Management: Predator and Competitor Control	Internal Field Assistance	
Big Spring spinedace (Lepidomeda mollispinis pratensis)	2	1.3.1	Develop genetic maintenance plan	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife	Management: Other, Management: Planning, Research: Genetics	Contract, Internal Technical Assistance	
Big Spring spinedace (Lepidomeda mollispinis pratensis)	2	1.3.2	Implement genetic maintenance plan	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife	Management: Other	Internal Field Assistance	
Big Spring spinedace (Lepidomeda mollispinis pratensis)	2	1.3.3	Develop habitat rehabilitation plan	Ongoing Current	FY 2005		U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Bureau of Land Management	Management: Planning	Internal Technical Assistance, Species Expert	BLM working through Big Spring spinedace RIT is developing plans and NEPA for this (2008/2009).
Big Spring spinedace (Lepidomeda mollispinis pratensis)	2	1.3.4	Implement habitat rehabilitation plan	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Bureau of Land Management	Management: Habitat Maintenance and Manipulation	Internal Field Assistance	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Big Spring spinedace (Lepidomeda mollispinis pratensis)	1	1.4.1	Develop population monitoring plan	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife	Management: Planning	Internal Technical Assistance, Species Expert	USGS developing and testing protocol using PIT tags to monitor movement of spinedace and other fish (beginning 2008)
Big Spring spinedace (Lepidomeda mollispinis pratensis)	1	1.4.2	Implement population monitoring plan	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife	Research: Population Surveys	Internal Field Assistance	Conducting three pass electrofishing annually.
Big Spring spinedace (Lepidomeda mollispinis pratensis)	3	1.5.1	Develop public outreach program	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife, U.S. Bureau of Land Management	Management: Planning	Internal Technical Assistance	BLM & grazing permittee are working with FWS on use of livestock to control tules, hence exotic crayfish, in system.
Big Spring spinedace (Lepidomeda mollispinis pratensis)	3	1.5.2	Implement public outreach program	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife, U.S. Bureau of Land Management	Other: Information and Education	Internal Administrative, Internal Technical Assistance	
Big Spring spinedace (Lepidomeda mollispinis pratensis)	1	2.1	Select suitable refugia sites	Ongoing Current	FY 2000 - FY 2004		U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife, U.S. Bureau of Land Management	Management: Propagation	Internal Field Assistance	Initiated research of potential sites in FY 2003.
Big Spring spinedace (Lepidomeda mollispinis pratensis)	1	2.2	Secure selected refugia habitat	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Bureau of Land Management	Acquisition, Management: Propagation	Internal Administrative, Internal Technical Assistance	
Big Spring spinedace (Lepidomeda mollispinis pratensis)	1	2.3	Develop refugia habitat rehabilitation plans	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Bureau of Land Management	Management: Habitat Maintenance and Manipulation	Contract, Internal Field Assistance	
Big Spring spinedace (Lepidomeda mollispinis pratensis)	1	2.4	Implement refugia habitat rehabilitation plan	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, U.S. Bureau of Land Management	Management: Habitat Maintenance and Manipulation	Contract, Internal Field Assistance	

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Big Spring spinedace (Lepidomeda mollispinis pratensis)	1	2.5	Develop refugia introduction plan	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife	Management: Planning	Internal Technical Assistance, Species Expert	
Big Spring spinedace (Lepidomeda mollispinis pratensis)	1	2.6	Implement introduction plan	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife	Management	Internal Field Assistance	
Big Spring spinedace (Lepidomeda mollispinis pratensis)	1	2.7	Develop refugium population monitoring plan	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife	Management: Planning, Management: Propagation	Internal Technical Assistance, Species Expert	
Big Spring spinedace (Lepidomeda mollispinis pratensis)	1	2.8	Implement refugium population monitoring plan	Not Started			U.S. Fish and Wildlife Service, Ecological Services Division, Nevada Department of Wildlife	Management: Other	Internal Field Assistance	